DOCKET NO.: 302203.1 / MSFT-1734
Application No.: 10/606,343
Office Action Dated: March 6, 2006

PATENT
AMENDMENTS AND ARGUMENTS IN SUPPORT
OF PATENTABIILTY OF THE CLAIMS
PURSUANT TO 37 CFR § 1.114

REMARKS

Upon entry of the present amendment, claims 31-51 will be pending in this application. Claims 1-30 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,480,836 ("Colby") in view of U.S. Patent No. 6,775,675 ("Nwabueze"). Applicants note that claims 1-30 are hereby cancelled. Accordingly, reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejections are respectfully requested.

The claimed invention enables a measure to be allocated across a dimension when there is no existing data table that includes such data. For example, consider the scenario in which there is existing data for forecasted sales per product category – but there is no existing data for forecasted sales per product category per customer (this scenario is depicted in Figs. 2, 3 and 5 of the present application). In this scenario, it may be desirable generate a cube that allocates forecasted sales of a product category (*i.e.,* product category Y) across certain customers. We know from Fig. 3 that there are 10 total forecasted sales for product category Y. However, we do not know how many of the 10 total forecasted sales to allocate to each of the customers.

The claimed invention provides a technique for allocating the 30 total forecasted sales of product category Y to each of the customers. First, the Forecast table (Fig. 5) is examined to identify all products (D and E) in product category Y. Then, the Sales table 300 (Fig. 2) is examined to identify all rows with one of the identified products D or E (these are rows 2 and 5 of Sales table 200). Then, each identified row is examined to determine the customers that are listed in the identified rows (these are customers 1 and 2). Then, the 10 total forecasted sales of product category Y are allocated across the identified customers. The 10 total forecasted sales of product category Y are allocated to only customers 1 and/or 2 (and not customer 3).

Colby discloses a system and method for determining and generating candidate views for a database. These candidate views are data tables that include a select portion of data that corresponds to anticipated user queries. For example, if it is anticipated that a user will submit a number of queries requesting information about forecasted sales totals for specific products during specific quarters, then an aggregated table may be generated that includes

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selected data from a forecasted sales table, a product table, and a time/period table. (Colby, Col. 7, ll. 61 – Col. 8, ll. 19).

Thus, although Colby discloses that *existing* data may be selected and aggregated to form a desired view, Colby does not teach or suggest allocating a measure when such data does *not* exist. The process for performing this allocation is clearly recited in new independent claims 31, 38 and 45 as follows:

> allocating a value of the measure for the entry of the first dimension by:
>> identifying each row in the third table within which a value of the third attribute matches a value of the entry of the first dimension;
>> identifying a value of the first attribute within each identified row in the third table, and, for each identified value of the first attribute:
>>> identifying each row in the first table that includes the value of the first attribute, the first table including no data for the measure;
>>> identifying a value of the second attribute within each identified row in the first table; and
>>> identifying each entry in the second dimension for which a value of the entry of the second dimension matches an identified value of the second attribute; and
>> allocating at least a portion of the value of the measure for the entry of the first dimension to at least one of each identified entry of the second dimension.

In particular, the above steps require allocating a measure (*e.g.,* the Forecasted sales measure) by identifying rows and attribute values within the first table (*e.g.,* the Sales table 200 of Fig. 2). However, the first table (*e.g.,* the Sales table 200 of Fig. 2) includes **no** data for measure (*e.g.,* the Forecasted sales measure). Colby does not teach or suggest allocating a measure by identifying rows and attribute values in a table that includes **no** data for the measure. Nwabueze similarly fails to teach or suggest this feature. Accordingly, Applicants respectfully submit that new claims 31-51, including independent claims 31, 38 and 45, are patentable over the cited references.
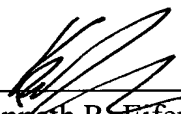
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CONCLUSION

In view of the above amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. Applicants respectfully submit that no new matter has been added by the present amendment. Reconsideration of the application is respectfully requested.

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Kenneth R. Eiferman
Registration No. 51,647

Woodcock Washburn LLP
One Liberty Place - 46th Floor
Philadelphia PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439